# Appendix B- Mind’s On Article

# Do the print media “hype” genetic research? A comparison of newspaper stories and peer-reviewed research papers

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## Abstract

**Background:** The public gets most of its information about genetic research from the media. It has been suggested that media representations may involve exaggeration, called “genohype.” To examine the accuracy and nature of media coverage of genetic research, we reviewed the reporting of single-gene discoveries and associated technologies in major daily newspapers in Canada, the United States, Great Britain and Australia.

**Methods:** We used neutral search terms to identify articles about gene discoveries and associated technologies hosted on the Dow Jones Interactive and Canadian NewsDisk databases from January 1995 to June 2001. We compared the contents, claims and conclusions of the scientific journal article with those of the associated newspaper article.

Coders subjectively assigned the newspaper articles to 1 of 3 categories: moderately to highly exaggerated claims, slightly exaggerated claims or no exaggerated claims. We used classification tree software to identify the variables that contributed to the assignment of each newspaper article to 1 of the 3 categories: attention structure (positioning in the newspaper and length of the article), authorship, research topic, source of information other than the scientific paper, type and likelihood of risks and benefits, discussion of controversy, valuation tone (positive or negative), framing (e.g., description of research, celebration of progress, report of economic prospects or ethical perspective), technical accuracy (either omissions or errors that changed the description of the methods or interpretation of the results) and use of metaphors.

**Results:** We examined 627 newspaper articles reporting on 111 papers published in 24 scientific and medical journals. Only 11% of the newspaper articles were categorized as having moderately to highly exaggerated claims; the majority were categorized as having no claims (63%) or slightly exaggerated claims (26%).

The classification analysis ranked the reporting of risks as the most important variable in determining the categorization of newspaper articles. Only 15% of the newspaper articles and 5% of the scientific journal articles discussed costs or risks, whereas 97% of the newspaper articles and 98% of the scientific journal articles discussed the likelihood of benefits of the research.

**Interpretation:** Our data suggest that the majority of newspaper articles accurately convey the results of and reflect the claims made in scientific journal articles. Our study also highlights an overemphasis on benefits and under-representation of risks in both scientific and newspaper articles. The cause and nature of this trend is uncertain.